Delta Working Landscapes

Prepared by

Michael Machado, Delta Protection Commission

Proposed Organizational Project Sponsor/Co Sponsor

Ducks Unlimited, Hart Restoration

Date Prepared

May 15, 2012

Need for and Benefit of Project

Attention and effort is being focused on restoring the natural habitats of the Sacramento—San Joaquin Delta, to support aquatic and terrestrial wildlife. Many of these restoration projects require lands be taken out of agricultural production, which could have negative implications to the Delta's economy and culture. However, projects, referred to as 'Working Landscapes', enable farmland throughout the Delta to be utilized as valuable wildlife habitat by providing opportunities for private landowners to combine environmental stewardship with current agricultural practices.

The Delta Protection Commission's Working Landscapes projects set out to improve the environmental quality of existing landscapes in the Delta; coordinate programs with local farmers to understand the social, economical, environmental and governmental policy hurdles and incentives to perform conservation practices; and communicate to farmers the advantages of implementing wildlife friendly agricultural practices.

The agricultural and wildlife resources on the Delta face threats from a variety of land use and management problems. Subsidence of peat soils through oxidation and wind erosion, soil salinity, erosion of perimeter levees, invasive species, urban encroachment, and crop changes are some of the problems which threaten the integrity of the Delta's agricultural productivity and wildlife resources. Working Landscapes provide an opportunity to integrate wildlife conservation with productive agriculture on the same land.

Brief Project Description

Delta Working Landscapes approaches these problems through a variety of methods. Planting vegetative buffers along irrigation ditch banks and hedgerow plantings to improve water quality by reducing runoff of pesticides and sediment, and farming approaches which can benefit wildlife and other environmental aspects will be implemented. Farm cultural practices ideal for wildlife friendly agriculture, such as rice conversions will be identified and considered for seasonal flooding and restoration to increase winter wildlife habitats. Projects such as these will also support water quality, salinity control, subsidence reversal, weed control, as well urban encroachment.

Rice, grown in flooded fields during the growing season and post harvest flooding will reduce the subsidence of peat soils, help flush salts from the soils, and provide effective control of invasive species, while creating high quality seasonal habitat for wintering waterfowl. Wetland-dependent wildlife benefit significantly from the waste grain and invertebrates that are associated with flooded agricultural fields.

Rice is an alternative to traditional truck crops, irrigated corn or permanent crops, which offer little habitat value. Management practices, such as minimal tillage, will reduce oxidation and post harvest

flooding in addition to retarding oxidation will be habitat to migrating waterfowl. Careful monitoring of fields will be maintained throughout the course of harvest and migration periods to detect benefits to agriculture and wildlife.

Estimated Cost and Proposed Funding Source(s)

\$1,000,000, from Proposition 50.

Delta Working Landscapes estimates to convert 1000 acres of permanent or truck crop farmland in the Delta to rice for flooded ag.

Task	Cost per Acre	Total
Rice conversion—year 1	\$150 @ 1000 acres	\$150,000
Rice conversion—year 2	\$150 @ 1000 acres	\$150,000
Rice conversion—year 3	\$150 @ 1000 acres	\$150,000
Flooded bonus—year 1*	\$25 @ 1000 acres	\$25,000
Flooded bonus—year 2*	\$25 @ 1000 acres	\$25,000
Flooded bonus—year 3*	\$25 @ 1000 acres	\$25,000
Design and Implementation for buffer strips/hedgerows/etc.	\$225 @ 1000 acres	\$225,000
Administrative fees		\$250,000
Total		\$1,000,000

^{*} Bonus will be given for flooding beyond 8 months (growing season + winter)

Proposed Schedule including Design, Approvals, and Implementation

The proposed project schedule is to occur over four years. The first six months will be dedicated to planning, designing, permitting, and other necessary pre-implementation requirements. Implementation will occur over three years. This will include overseeing the management of the fields for rice harvesting and flooding, as well observing and monitoring for agriculture and wildlife benefits. The last six months will be devoted to synthesizing raw data and identifying the results of the projects. Working Landscapes plans to publish the results through statewide media.

Potential Project Issues / Challenges and Possible Solutions

Challenge/Issue	Solution
Lack of funding	A budget line item from the Governor to ensure
	funding is available throughout the four years
Lack of landowner interest	Public outreach and education; partner and
	identify willing stakeholders
Lack of landowner control	Landowners will take lead in
	management/harvest/planting of agricultural
	lands
Lack of water fowl	Space projects for short flight distances and ensure
	management practices will increase food supply

Map of Project: attachment

Attached is the map of the Legal Delta. Projects are to occur through out the Primary Zone of the Legal Delta. No specific sites have been identified yet.

Economic Analysis of Conveyance Alternatives and Impacts to the Delta Environment, Economy, Recreation, and Legacy Communities

Prepared by

Michael Machado, Delta Protection Commission (DPC)

Proposed Organization Project Sponsor/Co Sponsor

DPC; administered by the Executive Director

Date Prepared

June 13, 2012

Need for and Benefit of Project

The 1992 Delta Protection Act (Johnston) declared the Sacramento-San Joaquin Delta of state-wide importance and created the DPC to protect, maintain, and enhance the overall quality of the Delta environment including, agriculture, wildlife habitat, and recreation. As part of the 2009 Delta Reform Act (SBx7-1) the DPC was charged with creating an Economic Sustainability Plan for the Delta. This plan identified the need and importance to evaluate the impacts which will be associated with a conveyance system running through the Delta. This proposal will evaluate the proposed conveyance alternatives and their potential impacts to the Delta environment, economy, recreation, and legacy communities.

Brief Project Description

The DPC will ask for an RFP for a project team comprised, at a minimum of the following: facilitator an economist, a levee engineer, fishery biologist, urban planner. Conveyance alternatives proposed by the Bay Delta Conservation Plan and the Delta Stewardship Council's Delta Plan will all be evaluated as to impacts these alternatives would have on the sustainability of the Delta's economy and culture.

Potential partners will include the Delta Conservancy; Reclamation Districts; Delta County Economic Development Departments; Delta County Planning Departments; Delta County Flood Agencies; and Delta County Water Resources and Public Work Departments.

This study will be used to informed and guide the Delta Stewardship Council, California Department Fish and Game, California Department of Water Resources, California Legislature and California Governors Office and Delta Counties and stakeholders on the effects, benefits and mitigations options.

Estimated Cost and Proposed Funding Source (s)

\$500,000

Proposed Schedule including Design, Approvals, and Implementation

January 2013 – Request for Proposals

February 2013 – *initiate Contract*

March 2013 – evaluation of conveyance alternatives

April 2013 – analysis of alternatives to the Delta environment, economy, recreation, and legacy communities, etc.

May 2013 – synthesis of impacts associated with conveyance alternatives / creation of plan or recommendations to avoid detrimental impacts

June 2013 – draft complete for review July 2013 – final document completed

Potential Project Issues / Challenges and Possible Solutions

The Delta includes the jurisdictions of multiple counties, cities, state agencies, and local agencies. Its numerous resources of local, statewide, national, and international importance include potable water, wildlife habitat, prime farmland, and water based recreation areas. Planning and managing these resources to maximize their benefits to the numerous, and sometimes conflicting, stakeholders, who are dependent upon them, while ensuring long-term sustainability of the Delta environment, is a complex challenge. This project will provide an objective analysis of currently proposed water conveyance alternatives and what the implications of these options would be to the Delta Environment, Economy, Recreation, and Legacy Communities.

Map of Project: attachment

Attached is the map of the Legal Delta, this will serve as the study boundary for the impact analysis

Emergency Preparedness and Flood Response Program in the Delta

Prepared by

Michael Machado, Delta Protection Commission (DPC)

Proposed Organization Project Sponsor/Co Sponsor

DPC; administered by the Executive Director

Date Prepared

June 13, 2012

Need for and Benefit of Project

The 1992 Delta Protection Act (Johnston) declared the Sacramento-San Joaquin Delta of state-wide importance and created the DPC to protect, maintain, and enhance the overall quality of the Delta environment including, agriculture, wildlife habitat, and recreation. The goal of the DPC is to ensure orderly, balanced conservation and development of Delta land resources and improved flood protection. As part of the 2009 Delta Reform Act (SBx7-1) the DPC was charged with creating an Economic Sustainability Plan (ESP) for the Delta, which was completed in 2011 and included recommendations for levees and public safety, agriculture, recreation and tourism, infrastructure, habitat and ecosystem, and water supply; as related to the long term economic sustainability of the Delta. The ESP recognizes the importance of improving emergency preparedness in the Delta for dealing with levee failures after they occur and the need to treat the Delta as a coordinated area of operation for emergency planning and response. SB 27 (Simitian) is referred to throughout relevant sections of the ESP as the Delta Multi-Hazard Coordination Task Force was organized in response to this legislation, which developed a report with recommendations for emergency planning and response in the Delta.

Brief Project Description

Relevant recommendations include the transfer to a regional agency authority for the maintenance of emergency preparedness, response, and recovery systems developed with federal, state, and local governments; ongoing funding for emergency preparedness, stock piling flood fight materials, response, and recovery; and the implementation of recommendations contained in the SB27 Delta Multi-Hazard Coordination Task Force report. This would be a regional effort in coordination with Cal EMA.

An RFP would request a project team with expertise in emergency service planning, emergency response and experience in flood fights.

Potential partners will include the Delta Conservancy; Reclamation Districts; Delta County Economic Development Departments; Delta County Planning Departments; Delta County Flood Agencies; and Delta County Water Resources and Public Work Departments.

This study will be used to informed and guide the Delta Stewardship Council, California Department Fish and Game, California Department of Water Resources, California Legislature and California Governors Office.

Estimated Cost and Proposed Funding Source (s)

\$250,000

Proposed Schedule including Design, Approvals, and Implementation

January 2013 – Request for Proposals
February 2013 – initiate Contract
July 2013 – draft study/plan for emergency preparedness and flood response in the Delta
September 2013 – draft complete for review

Potential Project Issues / Challenges and Possible Solutions

Challenges include the integration of programs across different jurisdictions with varying capabilities and resources. Solutions to overcome this include working closely with local governments to develop an integrated program which spans the entirety of the Delta.

Map of Project: attachment

Attached is the map of the Legal Delta, this will serve as the study boundary for emergency preparedness and flood response.

Feasibility of Implementation Study for a Regional Assessment District for Levee Maintenance and Repair

Prepared by

Michael Machado, Delta Protection Commission (DPC)

Proposed Organization Project Sponsor/Co Sponsor

DPC; administered by the Executive Director

Date Prepared

June 13, 2012

Need for and Benefit of Project

The 1992 Delta Protection Act (Johnston) declared the Sacramento-San Joaquin Delta of state-wide importance and created the DPC to protect, maintain, and enhance the overall quality of the Delta environment including, agriculture, wildlife habitat, and recreation. The goal of the DPC is to ensure orderly, balanced conservation and development of Delta land resources and improved flood protection. As part of the 2009 Delta Reform Act (SBx7-1) the DPC was charged with creating an Economic Sustainability Plan (ESP) for the Delta, which was completed in 2011 and included recommendations for levees and public safety, agriculture, recreation and tourism, infrastructure, habitat and ecosystem, and water supply; as related to the long term economic sustainability of the Delta. The ESP recognizes the importance of maintaining the Delta levee system.

This project addresses the issue of funding and regional coordination of levee maintenance, improvement and repair. It looks at the feasibility of a regional assessment district and shifting the reliance on subvention funds to benefactors of levees in addition to landowners who are now being assessed for levee maintenance.

Brief Project Description

The Study will determine the feasibility of implementing a regional assessment district for the maintenance and repair of Delta levees.

An RFP will include expert on establishing assessment districts, expert on identifying beneficiaries with background in modeling assessments and a facilitator to develop outreach to stakeholders.

Potential partners will include the Delta Conservancy; Reclamation Districts; Delta County Economic Development Departments; Delta County Planning Departments; Delta County Flood Agencies; and Delta County Water Resources and Public Work Departments.

This study will be used to informed and guide the Delta Stewardship Council, California Department Fish and Game, California Department of Water Resources, California Legislature and California Governors Office.

Estimated Cost and Proposed Funding Source (s)

\$250,000

Proposed Schedule including Design, Approvals, and Implementation

January 2013 – Request for Proposals
February 2013 – initiate Contract
July 2013 – draft study/plan for feasibility of an assessment district
September 2013 – draft complete for review

Potential Project Issues / Challenges and Possible Solutions

Challenges include the integration of programs across different jurisdictions with varying capabilities and resources. Solutions to overcome this include working closely with local governments to develop an integrated program which spans the entirety of the Delta.

Map of Project: attachment

Attached is the map of the Legal Delta, this will serve as the study boundary for an assessment district.

- A. Name of Proposed Project: Master Plan for the Great California Delta Trail
- B. Prepared by: Michael Machado, michael.machado@delta.ca.gov, (916) 375-4800
- C. Proposed Organizational Project Sponsor/Co-Sponsor: Delta Protection Commission
- **D. Date Prepared:** 05/10/12
- **E. Brief Project Description:** The Delta Trail concept was born out of Senate Bill 1556 (Torlakson). The bill requires that:

...the commission shall develop and adopt a plan and implementation program,... for a continuous regional recreational corridor that will extend around the ...delta, including, but not limited to, the delta's shorelines in Contra Costa, Solano, San Joaquin, Sacramento, and Yolo Counties. This plan shall link the San Francisco Bay Trail system to the planned Sacramento River trails in Yolo and Sacramento Counties...'

Blueprint Reports were identified as the first step of the planning process. The Great California Delta Trail Blueprint Report for Contra Costa and Solano Counties was completed in 2010 with funding from the California Coastal Conservancy and Contra Costa County; and in-kind assistance from the National Park Service's Rivers, Trails and Conservation Assistance (RTCA) Program. The Commission is currently developing The Blueprint Report for Sacramento, San Joaquin, and Yolo Counties, which is being done in-house, with in-kind assistance from the RTCA program, and is expected to be completed by Summer of 2013. The blueprint reports are intended to serve as pre-planning documents and will be followed by a Delta Trail Master Plan. The Master Plan will serve as a long term planning document to guide the implementation of the Delta Trail, specifically identifying potential linkages between isolated trail segments from throughout the Delta's cities and counties, as well as linkages to the Bay Trail and Sacramento River Trails. Public involvement is a significant component of the Delta Trail planning process, and will continue to be solicited through Stakeholder and Technical Advisory Committees, as well as public workshops and other activities.

F. Need for and Benefits of Project: Numerous benefits can stem from the Delta Trail Master Plan including an increase in Delta recreation and public access, as well as an increase awareness of the Delta as a place. In addition to fulfilling the requirements of SB 1556, the Delta Trail will support a number of other current or recently completed Delta planning processes. California State Park's Recreation Proposal for the Sacramento San Joaquin Delta and Suisun Marsh recognizes the need for regional trails in the Delta. The Economic Sustainability Plan for the Sacramento San Joaquin Delta, recently completed by the Delta Protection Commission (DPC), recognizes the importance that recreation plays in the Delta's economy, and amongst other things recommends the creation of focal point destination complexes with natural areas, parks, communities, marinas, historic features, and trails. Finally, the DPC is completing a feasibility study for a National Heritage Area designation in the Delta. Goals of this designation include economic development of the Delta through tourism and recreation, as well as an increase in visitor amenities such as signage and recreation maps. In summary, a number of planning efforts have been recently completed, or are currently being conducted, which focus on the enhancement of Delta recreation to assist with economic sustainability in a way that is consistent with the Delta Reform Act of 2009 and defining the Delta as an evolving place. Additionally this project is consistent with prior requests in water bonds that recognized the values of public access and recreational opportunities integrated with water policies.

- **G.** Estimated Cost and Proposed Funding Source(s): \$250,000. Grant funding to continue to support this project.
- H. Proposed Schedule including Design, Approvals, and Implementation:

August 2013 - Request for proposals to acquire consultant services

October 2013 - Initiate contract with consultants to conduct the master plan

November 2013 - Inventory and mapping of existing conditions

March 2014 - Needs analysis

July 2014 - Access and trail alternatives (alternative scenarios developed and tested)

November 2014 - Access and trail recommendations (20 year vision)

March 2014 - Implementation strategy (cost, financial planning, funding, agriculture protection, levee protection, safety, security, liability)

September 2014 – Draft document completion

October 2014 - October 2015 - Environmental review period

January 2016 - Final document completion

- I. Potential Project Issues/Challenges and Possible Solutions: The landscape of the Delta poses challenges for the development of a regional trail system as it is predominantly agricultural land in private ownership surrounded by narrow levee roads. Throughout Delta Trail planning, the DPC will play a role as a facilitator organization, working closely with local government; and representatives from groups in each county including habitat, agriculture, business, and recreation, to ensure that plans are closely aligned with the varied local interests. capabilities, and infrastructure. The DPC does not support the use of eminent domain. Tools such as fee purchases, easements, licenses, and MOUs can be explored to acquire property access in relevant areas, with the consent and involvement of willing landowners. Existing public lands will be identified as key places for Delta Trail implementation and water trails can also be a viable option to ensure trail continuity in places where land trails are not feasible. however sensitive habitat and wildlife areas will not be adversely affected. Buffer zones can be implemented between the trail and places with sensitive habitat and private uses. As the protection of agricultural integrity and viability has been a key priority for the DPC since its formation, the DPC will work to ensure that there will be no negative impacts on agricultural practices stemming from Delta Trail activities through involving the local agricultural community in trail planning, the continued observance of county right-to-farm ordinances, and consistency with the DPC's Land Use and Resource Management Plan for the Primary Zone of the Delta which has numerous policies that support the protection of agriculture. The DPC will also recommend that improvement plans for certain infrastructure in the Delta, such as State Routes (12, 160, and 4), as well as Delta levees, incorporate plans for bicycle/pedestrian trails as a component of the improvements. Through outreach and participation, the DPC aims to educate the public about tools such as these, which will be utilized to ensure that once implemented, the Delta Trail will be consistent with existing Delta land uses.
- **J. Map of Project:** See next page for map of the Delta. As this process is still in the pre-planning phases, there is no specific map of a future Delta Trail system.